



SPECIFICATION CHANGE-NOTICE (SCN)

1. Originator Name and Address AES-210 Washington, DC 20591		2. <input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Approved	3. Code Ident N/A	4. Spec No. NAS-SR-1000
7. System Designation NAS		8. Related ECR/NCP No. 9130, 9255, 9301 9384, 9600	9. Contract No. N/A	6. SCN No. 6
11. Configuration Item Nomenclature System Requirements Specification		12. Effectivity N/A		

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13. SCN No.	14. Pages Changed (Indicate Deletions)	S*	A*	15. Date
6	NCP 9130: 3-118, 3-127, 3-128, 3-154, 3-155, 3-156 C-19, C-19A, C-19B	X		07/14/87
6	NCP 9255: 3-8, 3-124	X		07/14/87
6	NCP 9301: 3-38	X		07/14/87
6	NCP 9384: 3-95, 3-96, 3-97	X		07/14/87
6	NCP 9600: 3-126, 3-130, 3-130A, 3-130B	X		07/14/87
6	Table of Content: iv, iv-A, iv-B	X		07/14/87
4	3-44	X		08/25/86
5	3-110	X		10/20/86
5	3-114A	X		10/20/86

16. Technical Concurrence John Fugett, Project Manager	17. Date 10/22/87
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* S - Indicates Supersedes Earlier Page; A - Indicates Added Page

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3.1.1.A.2.a

- | (2) Visibility |
- | (3) Precipitation occurrence, type and amount |
- | (4) Temperature |
- | (5) Dew point |
- | (6) Wind speed, direction, and peak gusts |
- | (7) Altimeter setting and density altitude |
- | (8) Obstruction to visibility |
- | (9) Lightning or thunderstorms |
- | (10) Runway visual range |
- | (11) Snow depth and runway surface condition |

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3.2.2

- B. The **NAS** shall receive and transmit position information via two-way communications with controlled aircraft within assigned airspace. Air-ground voice and data communications shall be provided from ground level to a minimum of **3000** feet **AGL** for a distance of 5 statute miles around towers at terminal facilities in the ~~conterminous~~ United States, Alaska, Hawaii, and Puerto Rico.
- C. The **NAS** shall receive specialists' inputs, display position data received from all sources, process this information, apply procedural standards, and issue sequencing and spacing advisories to specialists.
 - 1. The **NAS** shall receive specialists' inputs on ~~aerodrome~~ acceptance rates. Using the flight plan information and available surveillance data, the **NAS** shall apply standards for separation assurance and generate traffic sequencing and spacing advisories for orderly traffic flow making the maximum use of available ~~aerodrome~~ and airspace capacity. The **NAS** shall provide checking of all sequencing and spacing advisories for clearance-based trajectories, for aircraft-aircraft conflicts, and aircraft intrusion into special use airspace.
 - 2. The **NAS** shall adjust the air traffic sequence based on inputs from specialists specifying desired sequence and time at meter fixes for selected aircraft.
 - 3. The **NAS** shall respond to specialists' sequencing and spacing inputs in no more than **3.0** seconds maximum and update this information base within **12.0** seconds of receiving new flight information. Responses to input of surveillance information updates shall be within 2 seconds.
 - 4. The **NAS** shall provide a capability to evaluate alternate clearances for sequencing and spacing problems within predetermined time limits. Problems identified in the alternate clearance shall be ~~displayed~~ to the requesting specialist as priority (action necessary) or advisory (information only) messages.
- D. The **NAS** shall be able to receive and process all departure requests and display them to the appropriate specialists.

3.2.2

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3.2.3.C

3. The **NAS** shall aid the ~~specialist~~ in adjustment of the clearance-based trajectory ~~when~~ the track position along the flight path exceeds ~~present~~ conformance bounds of the projected position.
 4. The **NAS** shall aid the specialist in determining the course ~~required~~ to realign a ~~controlled~~ aircraft with its authorized route after a deviation from it has occurred.
 5. The **NAS** shall provide reminders to the specialist for each designated maneuver point in the current clearance-based trajectory.
 6. The **NAS** shall alert the specialist when a controlled aircraft's track position is outside of the preset conformance bounds of its clearance-based trajectory in the lateral or vertical direction.
- D. The **NAS** shall provide accurate weather information such as real-time winds and temperatures aloft to support flight path prediction.
1. The **NAS** shall provide forecast weather for trajectory development within 30 seconds of weather-? ~~object~~ delivery to the **NAS**.
 2. The **NAS** shall provide both current and forecast weather information in a compatible form to the systems performing the projection function.
 3. The **NAS shall** display graphic weather data to the specialists with at least 7 levels of precipitation intensity. These levels shall be independently selectable by the controller.
- E. The **NAS** shall provide detection of any aircraft throughout an Air Defense Identification Zone (**ADIZ**), Distant Early Warning Identification Zone (**DEWIZ**), and ~~conterminous~~ United States airspace.
- F. The **NAS** shall acquire and display surveillance information with accuracies sufficient to allow the separation of aircraft conducting approaches to parallel runways under the following conditions:

3.2.3.F

1. When runway ~~centerlines~~ are at least 2500 feet apart with successive aircraft 2 nmi apart on adjacent terminal precision approach landing systems
 2. When runway centerlines are at least 4300 feet apart with simultaneous approaches made by aircraft on adjacent terminal precision approach landing systems
- G. The NAS shall provide independent surveillance coverage to the ground at all qualifying aerodromes and to specified minimum altitudes in all other areas.
1. The NAS shall provide independent surveillance of en route aircraft through a means which does not require cooperating equipment on the aircraft. Such surveillance shall generally be provided over ~~conterminous~~ United States from 6000 feet MSL to FL 200 over ~~nonmountainous~~ terrain and from 6000 feet MSL or the MEA, whichever is higher, to FL 200 in mountainous terrain.
 2. The NAS shall provide independent surveillance coverage of aircraft in terminal areas through a means which does not require cooperating equipment aboard the aircraft. Such surveillance shall be provided in selected areas to the ground and in transitional airspace as required.
 3. The NAS shall detect and process independent cooperative surveillance information for properly equipped en route aircraft. Such surveillance shall generally be provided over ~~conterminous~~ United States from 6000 feet MSL to FL 600 over nonmountainous terrain and from 6000 feet MSL or the MEA, whichever is higher, to FL 600 in mountainous terrain,
 4. The NAS shall detect and process independent cooperative surveillance information for properly equipped aircraft. Such surveillance shall be provided in selected terminal areas to the ground and in transitional airspace as required.
 5. The NAS terminal area surveillance response time, antenna boresight to display, which includes radar surveillance and data, shall be within 2.2 seconds. The NAS en route area surveillance response time, antenna boresight to display, which includes radar surveillance and data, shall be within 3.0 seconds.

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3.4.3.B

1. The **NAS** shall provide ~~selected aerodromes~~ with approach slope guidance lighting with ~~an~~ effective visual range during clear weather of a minimum 3 miles during daylight hours and 20 miles during night hours.
 2. The **NAS** shall provide selected ~~aerodromes~~ with approach slope guidance lighting systems that will, at a minimum, identify an appropriate glideslope and incursions outside of acceptable approach slope tolerances.
 3. The **NAS** shall provide selected ~~aerodromes~~ with runway end identifier lights to provide rapid and positive identification of the approach end of a particular runway. It shall also provide runway edge light systems, touchdown zone lighting, runway centerline lighting, runway remaining lighting, and ~~taxiway~~ turn-off lights.
 4. The **NAS** shall provide at selected ~~aerodromes~~, helipad landing area perimeter lights, landing direction lights; extended ~~edge~~, and extended wing light bars, and touchdown area lights.
- C. The **NAS** shall provide visual aids to identify and locate ~~aerodromes~~.
1. The **NAS** shall provide lighting systems to identify the type of ~~aerodrome~~ (e.g., ~~heliport~~, civil, seaplane), which can be seen for a minimum of 20 ~~nmi~~ at night and 3 ~~nmi~~ during daylight hours.
 2. The **NAS** shall provide lighting systems to locate and discriminate ~~aerodromes~~ from surrounding features (i.e. city lights, terrain, structures).
- D. The **NAS** shall ensure proper marking of obstructions in the vicinity of the landing area.
1. To identify obstructions, the **NAS** shall require lighting systems which will be visible from a minimum distance of 20 ~~nmi~~ in clear weather during hours of darkness.
 2. The **NAS** shall provide lighting and markings on those permanent obstructions on the ~~aerodrome~~ surface that could pose a threat to departing, arriving, or taxiing aircraft.

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3.5 Air Defense and Law Enforcement Surveillance

The **NAS** shall provide for the detection of any aircraft throughout an Air Defense Identification Zone (**ADIZ**), Distant Early Warning Identification Zone (**DEWIZ**), and all other airspace for which the **NAS** has responsibility. The **NAS** is ~~required~~ to ascertain the position, velocity, and altitude of aircraft in such airspace and to identify unauthorized intruders. The organization of requirements for air defense and law enforcement is illustrated in Figure 3-7.

3.5.1 Aircraft Detection and Identification

General Requirements

All aircraft entering an **ADIZ** or the **DEWIZ** shall be under surveillance at all times. The **NAS** shall be required to provide the current and expected location, altitude, speed, and course of each aircraft. National security and law enforcement interests require a method to determine whether the aircraft is authorized or unauthorized. This capability must be available at all times. The **NAS** must provide a means of communication to support these requirements.

Specific Requirements

- A. The **NAS** shall detect all aircraft entering an **ADIZ/DEWIZ**.
 1. The **NAS** shall detect any aircraft entering an **ADIZ/DEWIZ** area of surveillance coverage within 13 seconds of penetration.
 2. The **NAS** shall detect any aircraft entering an **ADIZ/DEWIZ** to a maximum altitude of 100,000 feet MSL and to a maximum surface range of 250 nmi., from ground level to +30 degrees relative to an earth tangential plane at the sensor site.
- B. The **NAS** shall provide the position, velocity, and altitude of all aircraft.
 1. The **NAS** shall detect the position of an aircraft entering an **ADIZ/DEWIZ** to within a range of 0.125 nmi and azimuth of 0.176 degrees of the aircraft's actual position.
 2. The **NAS** shall detect the velocity of an aircraft entering an **ADIZ/DEWIZ** to within 20 knots of the aircraft's actual speed in level-constant-speed flight and its course accurate to within 5 degrees (99th percentile) of the actual course.

3.6.2 Ground-Ground Interfacility Communications Connectivity

General Requirements

The **NAS** must be capable of transferring aviation-related information between the various **NAS** facilities and between **NAS** facilities and communication systems outside the **NAS**, both governmental and nongovernmental. Figure 3-10 illustrates the organization of interfacility communications.

Specific Requirements

- A. The **NAS shall** provide a communications capability between selected operating, supervisory, maintenance, and administrative positions at separate **NAS** facilities.
 1. The **NAS** shall provide direct-access voice communications connectivity between specialists in one **ATC** facility and designated specialists in another facility as shown in Table 3-1. The number of direct-access calls that are blocked because of saturation of equipment shall not exceed 1 in 1000 calls.
 2. The **NAS** shall provide capabilities for additional direct-access voice communications connectivity as shown in Table 3-2 for use within 2 minutes of a catastrophic failure in an **ACF**.
 3. Each facility manager, supervisory and specialist position in an **ACF**, **ATCT**, **AFSS**, the FAA Headquarters Operations Center, and the **ATCCC** shall be provided the capability for indirect-access voice communications connectivity with other positions in selected facilities as shown in Table 3-3.

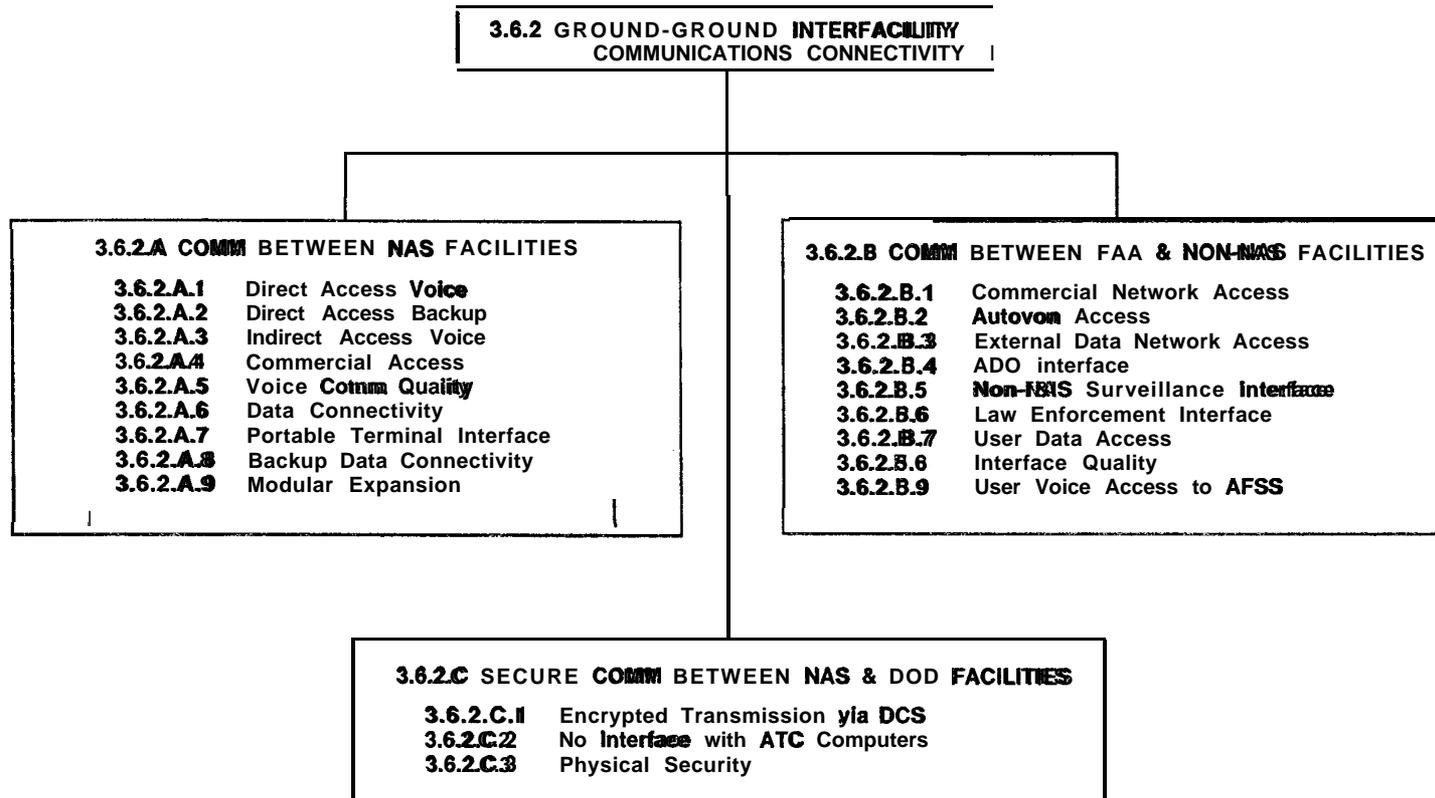


FIGURE 3-10
GROUND-GROUND INTERFACILITY COMMUNICATIONS
CONNECTIVITY REQUIREMENTS HIERARCHY

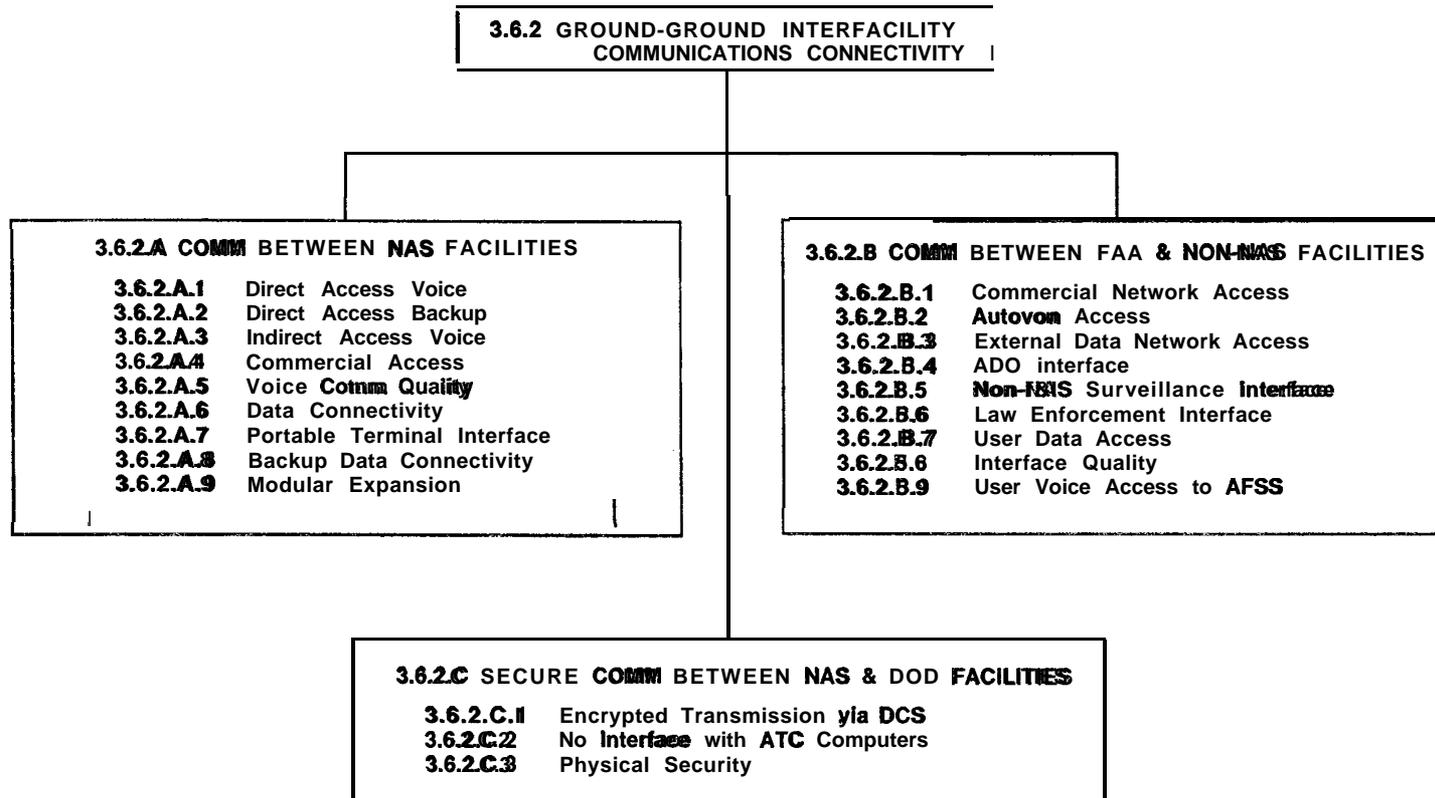


FIGURE 3-10
GROUND-GROUND INTERFACILITY COMMUNICATIONS
CONNECTIVITY REQUIREMENTS HIERARCHY

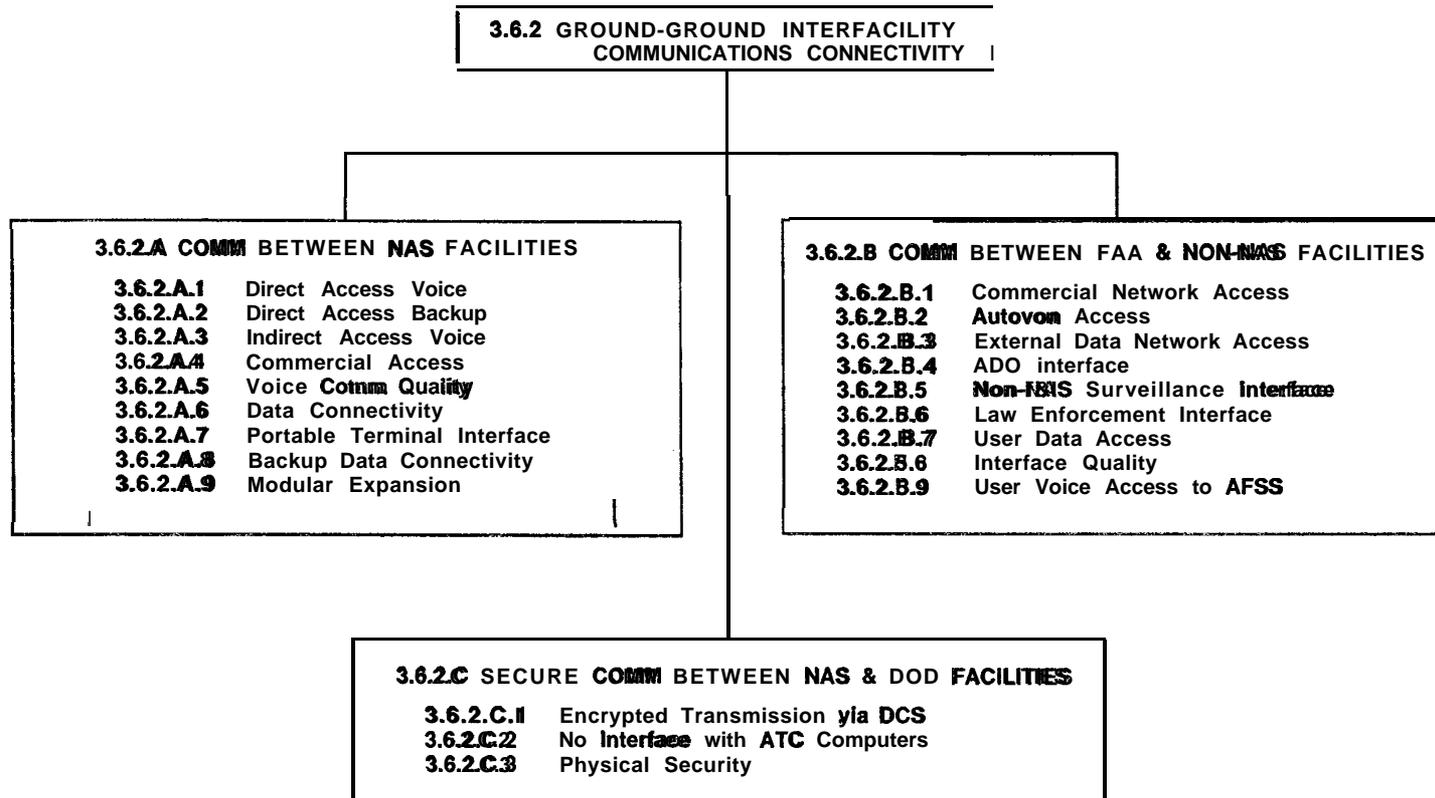


FIGURE 3-10
GROUND-GROUND INTERFACILITY COMMUNICATIONS
CONNECTIVITY REQUIREMENTS HIERARCHY

3.6.2.B.3

facilities, the ATCCC, and the FAA Headquarters Operations Center to access airline dispatch offices; foreign military and ATC facilities; and DoD air defense facilities, air defense control facilities, ATC facilities, base operations centers, and Strategic Air Command (SAC) centralized scheduling units

4. The NAS shall provide voice and data ~~communications~~ interface capabilities with appropriately equipped airline dispatch offices to accommodate air carrier automatic flight plan filing and cancellation capabilities.
5. The NAS shall provide a data communications interface capability to accommodate the exchange of surveillance information with properly equipped sources external to the NAS to complement the NAS surveillance coverage. Such sources shall include, but not be limited to, joint use surveillance facilities; military radars and surveillance processing facilities, such as Fleet Air Control and Surveillance Facilities (FACSFAC) and Programmable Indicator Data Processor (PIDP) sites; and airline tracking networks, such as the Aeronautical Radio, Inc. (ARINC) network.
6. The NAS shall provide voice and data communications interface capabilities with appropriate federal and local law enforcement agencies for the exchange of NAS surveillance information.
7. The NAS shall provide auto-answer capabilities for dial-up data communications by users through interface to commercial telephone lines for filing flight plans and amendments, requesting and receiving terminal and area-specific weather data, and other related purposes. The number of incoming calls blocked because of saturation of FAA-owned equipment shall not exceed 1 in 20 calls.
8. The quality of voice or data communications provided by the NAS interfacility ~~communications~~ network shall not be diminished by interfacing to public or private networks.

3.6.2.B.3

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TABLE 3-5
RECONFIGURATION CAPABILITIES

VOICE	DATA	NORMAL	BACKUP	CAPABILITIES	FACILITIES
X	X	X	X	NO TRANSMISSIONS INTERRUPTED	AT ALL ATC FACILITIES
X		X	X	NO TRANSMISSIONS IN QUEUE LOST	
X	X	X	X	NO INTERFERENCE WITH POSITIONS NOT BEING RECONFIGURED	
X		X	X	MENUS AND/OR MAPS FOR CHANGING INDIVIDUAL OR SETS OF VOICE FEATURES, INCLUDING DIRECT/INDIRECT ACCESS CONNECTIVITY	
X	X	X	X	INDIVIDUAL POSITION RECONFIGURATION BY SUPERVISOR USING MENU OR PRESET MAPS	AT ATCTs and AFSSs
X		X	X	SINGLE ACTION RECONFIGURATION FOR ALL POSITIONS AT ONCE AFTER MENU OR PRESET MAP SELECTION	
	X	X		COMPUTER-ASSISTED RECONFIGURATION OF ALL POSITIONS IN FACILITY	AT ACFs and ATCTs
X	X	X	BY	RECONFIGURATION FOR TRAINING OF CHANGES IN POSITION RESPONSIBILITIES SUPERVISORY COMMAND ONLY	
X		X	X	SIMULTANEOUS 1 TO 10 POSITION RECONFIGURATION BY SUPERVISOR USING SELECTABLE PRESET RECONFIGURATION MAPS	AT ACFs
X	X		X	PREDEFINE AND STORE UP TO 10 BACKUP CONFIGURATIONS	
X	X		X	SINGLE ACTION ACTIVATION OF THE SELECTED BACKUP CONFIGURATION	
X	X		X	SELECTED BACKUP CONFIGURATION OPERATIONAL WITHIN 2 MINUTES OF ACF FAILURE	
X	X	X	X	RESECTORIZATION (i.e., REASSIGNING SECTORS TO DIFFERENT POSITIONS) BY SUPERVISORY COMMAND ONLY	

TABLE 3-5
RECONFIGURATION CAPABILITIES

VOICE	DATA	NORMAL	BACKUP	CAPABILITIES	FACILITIES
X	X	X	X	NO TRANSMISSIONS INTERRUPTED	AT ALL ATC FACILITIES
X		X	X	NO TRANSMISSIONS IN QUEUE LOST	
X	X	X	X	NO INTERFERENCE WITH POSITIONS NOT BEING RECONFIGURED	
X		X	X	MENUS AND/OR MAPS FOR CHANGING INDIVIDUAL OR SETS OF VOICE FEATURES, INCLUDING DIRECT/INDIRECT ACCESS CONNECTIVITY	
X	X	X	X	INDIVIDUAL POSITION RECONFIGURATION BY SUPERVISOR USING MENU OR PRESET MAPS	AT ATCTs and AFSSs
X		X	X	SINGLE ACTION RECONFIGURATION FOR ALL POSITIONS AT ONCE AFTER MENU OR PRESET MAP SELECTION	
	X	X		COMPUTER-ASSISTED RECONFIGURATION OF ALL POSITIONS IN FACILITY	AT ACFs and ATCTs
X	X	X	BY	RECONFIGURATION FOR TRAINING OF CHANGES IN POSITION RESPONSIBILITIES SUPERVISORY COMMAND ONLY	
X		X	X	SIMULTANEOUS 1 TO 10 POSITION RECONFIGURATION BY SUPERVISOR USING SELECTABLE PRESET RECONFIGURATION MAPS	AT ACFs
X	X		X	PREDEFINE AND STORE UP TO 10 BACKUP CONFIGURATIONS	
X	X		X	SINGLE ACTION ACTIVATION OF THE SELECTED BACKUP CONFIGURATION	
X	X		X	SELECTED BACKUP CONFIGURATION OPERATIONAL WITHIN 2 MINUTES OF ACF FAILURE	AT ACFs
X	X	X	X	RESECTORIZATION (i.e., REASSIGNING SECTORS TO DIFFERENT POSITIONS) BY SUPERVISORY COMMAND ONLY	

3.7 Maintenance and Support

Responsive operational service to the users of the National Airspace System requires that FAA personnel and equipment be provided at appropriate locations to meet the current and expected demand. The requirement varies from providing assistance in determining optimum designs and locations of air traffic control facilities to ensuring that the **support** capabilities provide for continued reliable operation of the system. This requirement includes the necessary testing, training, maintenance, monitoring and flight inspections to ensure safety-of-flight, cost effectiveness, and the required system availability. The organization of requirements for maintenance and support is illustrated in Figure 3-12.

3.7.1 Maintenance and Monitoring

General Requirements

Safe operation of the National Airspace System (**NAS**) depends on the high **availability** and reliable performance of equipment and **software**. Ensuring this high level of availability requires timely **maintenance** and monitoring. Preventive maintenance is required to **minimize** equipment outages. Corrective maintenance is required to **repair** faulty items of equipment when detected. Monitoring the **performance** and status of **NAS** equipment and software and notifying **specialists** when problems arise are essential to ensuring safe and **reliable** operation. Efficiency and cost effectiveness **considerations** require that monitoring and control capabilities be **automatic** and remote for selected items, with data and failure **indications transmitted** to selected facilities for action by **appropriate** specialists. Equipment critical to safety requires **continuous** real-time monitoring with the capability for periodic airborne flight inspections for systems involving ground-air and air-ground communications, navigation, and surveillance. An integrated logistics support **system** is required to ensure that **NAS** **equipments** and systems can be maintained and supported in their operational environments as well as being cost-effective over their programmed life-cycles. A design **goal** for **remote** facilities shall be for on-site maintenance actions to occur no **more** frequently than once every **90** days.

Specific Requirements

- A. The **NAS** shall provide a system to monitor all critical parameters; display **system** status, equipment status and **performance**; and control appropriate parameters when preventive or corrective maintenance is required. An immediate alarm shall be made to appropriate specialists

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Specific Requirements

- A. The NAS shall provide a system to monitor all critical parameters; display system status, equipment status and performance; and control appropriate parameters when preventive or corrective maintenance is required. An immediate alarm shall be made to appropriate specialists

3.7.1-A

when one or **more** selected parameters is out of tolerance, equipment fails, or smoke or fire is detected.

1. A system shall be provided for specialists at selected facilities to monitor equipment ~~status~~ and performance and to control appropriate parameters, using sensors and built-in circuits, from workstations.
 - a. The monitoring system shall have the capability to collect data on equipment maintenance relevant to status and performance.
 - b. Monitoring devices, both built-in and external, shall not degrade the performance and user availability of the equipment being monitored.
 - c. The network used to control and monitor system performance shall provide positive evidence of its proper functioning.
 - d. The monitoring system shall have the **capabi. itty** to interpret sensor information and to indicate degraded performance or expected failure of selected equipments.
 - e. Remote control capabilities shall be provided for selected equipments to allow specified adjustment to equipment to keep parameters being monitored within specified ranges, switchover to back-up equipment in the event of equipment failure or performance degradation, and certify **equipment** performance.
2. The **NAS** shall provide continuous monitoring of status and parameters of surveillance, navigation, approach, and landing aids, and other **NAS** equipment and systems.
 - a. The characteristics of the radiated signals from a **NAVAID** shall provide means for the users to monitor the operational status of the **NAVAID**.
 - b. The monitoring system shall provide notification of any automatic **switchovers** for equipment and systems that are required for **system's safety**.

3.7.1-A

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3.7.1.C.1

- b. Preventive maintenance tools to be provided for **NAS computer** systems shall include on-line diagnostic aids to allow operational software and associated data bases to be exercised through functional paths for isolation of system problems.
 - c. The capability shall be provided for the recertification of equipment following maintenance actions to verify the suitability of the equipment for operational use.
2. Test circuitry and analysis capabilities shall be provided to allow diagnosis of the cause of an equipment/system failure, isolation of the fault, and operational checkout from an on-site, intermediate, or depot repair facility.
- a. The ~~capability~~ ~~capability~~ shall be provided for on-site ~~capability~~ ~~maintenance~~ at unmanned facilities to troubleshoot and make repairs, conduct physical inspections, and calibrate the operating equipment and monitoring devices. On site repairs would consist mainly of troubleshooting, removing and replacing Lowest Replaceable Units (**LRUs**), and checkout. A limited capability to repair systems components which are not **LRUs** shall be provided on-site.
 - b. Intermediate Level Repair Facilities shall be provided with adequate test and working equipment to support repair and maintenance activities determined to be the most effective at those locations.
 - c. The FAA Depot Repair Facility shall be provided with the capabilities to troubleshoot, repair, align, overhaul, and checkout equipment or **LRUs** which are difficult to repair. These repairs are beyond the capabilities of the Intermediate Level Repair Facilities.
 - d. National Field Support Sectors will address system wide problems, develop equipment and software modifications, and provide the highest level of technical assistance on individual facility problems.
 - e. Contractor maintenance support shall be used where appropriate to support maintenance activities.

3.7.1.C

3. Physical access shall be provided for specialists, test equipment, and replacement LRUs at all NAS facilities.
 - a. Common workstation interfaces shall be provided for maintenance and remote monitoring capabilities.
 - b. Communication links shall be provided between specialists at NAS facilities and intermediate repair facilities to support maintenance activities.

D. The NAS shall provide systems for integrated logistics support, maintenance management and logistics inventory management. These systems shall ensure the availability of calibrated test equipment, tools, supply support, and technical data to specialists. They shall provide a national data base of problems and their solutions and preserve maintenance and failure records for history and trend analysis. They shall also support acquisition of parts and materiel, and management, storage distribution and disposal of inventory.

1. All test equipment and repair parts required for repair of LRUs shall be provided to appropriate specialists. Spare parts shall be provided for on-site, intermediate, and depot maintenance involving replacement of LRUs.
2. The capability shall be provided to collect, record, process, summarize, and report information concerning equipment performance and related preventive maintenance and repair activities.
 - a. Equipment problems or failures, maintenance actions taken, and spares usage shall be recorded and made available for retrieval by specialists.
 - b. The capability shall be provided for processing, recording, and correlating parameter measurements to support trend analysis and failure anticipation functions.
 - c. Equipment status, performance parameters, and maintenance activity information shall be stored in a nationwide distributed data base with files that

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TABLE 3-7
NAS RESPONSE TIME REQUIREMENTS (IN SECONDS)
(Concluded)

<u>SECTION</u>	<u>MEAN</u>	<u>99%</u>	<u>MAXIMUM</u>
3.3.2 Traffic Advisories B.4	0.6	1.2	3.0
3.5.1 Aircraft Detection and Identification C.2	0.6	1.2	3.0

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~~SIGMET/WS/SIGNIFICANT~~ METEOROLOGICAL INFORMATION - A weather advisory issued concerning weather ~~significant~~ to the safety of all aircraft. **SIGMET** advisories cover severe and extreme turbulence, severe icing, and widespread dust or sand storms that reduce visibility to less than three miles.

SPECIAL USE AIRSPACE - Airspace of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities.

TYPE OF SPECIAL USE AIRSPACE:

1. Alert Area - Airspace which may contain a high volume of pilot training activities or an ~~unusual~~ type of serial activity, neither of which is ~~hazardous~~ to aircraft. Alert Areas are depicted on aeronautical charts for the information of pilots not involved in the activity for which the Alert Area is established. All activities within an Alert Area are conducted in accordance with Federal Aviation Regulations, and pilots of aircraft involved in the activity as well as pilots transiting the area are equally ~~responsible~~ for collision avoidance.
2. ~~Controlled~~ Firing Area - Airspace wherein activities are conducted under conditions so controlled as to eliminate hazards to aircraft not involved in the activity and to ensure the safety of persons and property on the ground.
3. Military Operations Area/~~MOA~~ - An airspace assignment of defined vertical and lateral dimensions established outside positive control areas to separate/segregate certain military activities from **IFR** traffic and to identify for **VFR** traffic where these activities are conducted.
4. Prohibited Area - Designated airspace within which the flight of aircraft is prohibited.
5. Restricted Area - Aerospace designated under FAR Part **73**, within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Most restricted areas are designated joint use, and **IFR/VFR** operations in the area may be authorized by the controlling **ATC** facility when it is not being utilized by the using agency. Restricted areas are depicted on en route charts. Where joint use is authorized, the name of the **ATC** controlling facility is also shown.

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NATIONAL AIRSPACE SYSTEM
SYSTEM REQUIREMENTS SPECIFICATION

NAS-SR-1000

CHANGE 6

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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